

CLAIMS:

What is claimed is:

1. A method in a data processing system for processing a request, the method comprising:
 - receiving the request;
 - responsive to a first hash value being present within the request, comparing the first hash value to a second hash value, wherein the second hash value represents a current policy configuration for a quality of service; and
 - responsive to a match between the first hash value and the second hash value, setting a quality of service based on information associated with the first hash value.
2. The method of claim 1, wherein the first hash value and the information are located in a cookie within the request.
3. The method of claim 2, wherein the cookie is located within a header of the request.
4. The method of claim 1, wherein the request is a hypertext transport protocol request.

1 5. The method of claim 1 further comprising:
2 responsive to an absence of a hash value in the
3 request, identifying a policy rule for processing the
4 request to form an identified policy rule;
5 identifying a classification for the request using
6 the identified policy rule;
7 hashing the current policy configuration, of which
8 the identified policy rule is a part, using a hashing
9 algorithm to generate a current hash value; and
10 placing the current hash value and the information
11 into the request.

1 6. The method of claim 5, wherein the hash value and
2 the information are placed into a cookie.

1 7. The method of claim 1, wherein the data processing
2 system is a server.

1 8. A method in a data processing system for processing
2 a request, the method comprising:
3 responsive to receiving a request containing a
4 selected cookie in which the selected cookie includes a
5 first hash value and information associated with the hash
6 value, determining whether the first hash value
7 corresponds to a second hash value, wherein the second
8 hash value represents a current policy configuration for
9 processing requests by the data processing system; and

responsive to a correspondence between the first hash value and the second hash value, processing the request using the information.

9. The method of claim 8 further comprising:

responsive to receiving a request containing the selected cookie, determining whether the selected cookie is stale;

responsive to an absence of a determination that the cookie being is stale, generating a new classification for the request; and

responsive to the cookie being stale, preventing initiation of the determining step.

10. The method of claim 9 further comprising:

responsive to an absence of the selected cookie, processing the request with the current policy configuration to generate a first classification for the request;

applying a hashing algorithm to the current policy configuration to generate the first hash value; and

placing the first hash value and information associated with the first hash value within a new cookie.

11. The method of claim 8, wherein the selected cookie includes a universal resource identifier, a user identification, and a user group identification.

1 12. The method of claim 8, wherein the information
2 includes a quality of service indicator.

1 13. A data processing system comprising:
2 a bus system;
3 a communications unit connected to the bus system;
4 a memory connected to the bus system, wherein the
5 memory includes a set of instructions; and
6 a processing unit connected to the bus system,
7 wherein the processing unit executes the set of
8 instructions to receive the request; compare the first
9 hash value to a second hash value in response to a first
10 hash value being present within the request, wherein the
11 second hash value represents a current policy
12 configuration for a quality of service; and set a quality
13 of service based on information associated with the first
14 hash value in response to a match between the first hash
15 value and the second hash value.

1 14. A data processing system comprising:
2 a bus system;
3 a communications unit connected to the bus system;
4 a memory connected to the bus system, wherein the
5 memory includes a set of instructions; and
6 a processing unit connected to the bus system,
7 wherein the processing unit executes the set of
8 instructions to determine whether the first hash value
9 corresponds to a second hash value in response to
10 receiving a request containing a selected cookie in which

11 the selected cookie includes a first hash value and
12 information associated with the hash value, wherein the
13 second hash value represents a current policy
14 configuration for processing requests by the data
15 processing system; and process the request using the
16 information in response to a correspondence between the
17 first hash value and the second hash value.

1 15. A data processing system for processing a request,
2 the comprising:

3 receiving means for receiving the request;

4 comparing means, responsive to a first hash value
5 being present within the request, for comparing the first
6 hash value to a second hash value, wherein the second
7 hash value represents a current policy configuration for
8 a quality of service; and

9 setting means, responsive to a match between the
10 first hash value and the second hash value, for setting a
11 quality of service based on information associated with
12 the first hash value.

1 16. The data processing system of claim 15, wherein the
2 first hash value and the information are located in a
3 cookie within the request.

1 17. The data processing system of claim 16, wherein the
2 cookie is located within a header of the request.

1 18. The data processing system of claim 15, wherein the
2 request is a hypertext transport protocol request.

1 19. The data processing system of claim 15 further
2 comprising:

3 first identifying means, responsive to an absence of
4 a hash value in the request, for identifying a policy
5 rule for processing the request to form an identified
6 policy rule;

7 second identifying means for identifying a
8 classification for the request using the identified
9 policy rule;

10 hashing means for hashing the current policy
11 configuration, of which the identified policy rule is a
12 part, using a hashing algorithm to generate a current
13 hash value; and

14 placing means for placing the current hash value and
15 the information into the request.

1 20. The data processing system of claim 19, wherein the
2 hash value and the information are placed into a cookie.

1 21. The data processing system of claim 15, wherein the
2 data processing system is a server.

1 22. A data processing system for processing a request,
2 the data processing system comprising:

3 determining means, responsive to receiving a request
4 containing a selected cookie in which the selected cookie

5 includes a first hash value and information associated
6 with the hash value, for determining whether the first
7 hash value corresponds to a second hash value, wherein
8 the second hash value represents a current policy
9 configuration for processing requests by the data
10 processing system; and

11 processing means, responsive to a correspondence
12 between the first hash value and the second hash value,
13 for processing the request using the information.

1 23. The method of claim 22, wherein the determining
2 means is a first determining means and further
3 comprising:

4 second determining means, responsive to receiving a
5 request containing the selected cookie, for determining
6 whether the selected cookie is stale;

7 generating means, responsive to an absence of a
8 determination that the cookie being is stale, for
9 generating a new classification for the request; and

10 preventing means, responsive to the cookie being
11 stale, for preventing initiation of the determining
12 means.

1 24. The data processing system of claim 23, wherein the
2 processing means is a first processing means and further
3 comprising:

4 second processing means, responsive to an absence of
5 the selected cookie, for processing the request with the
6 current policy configuration to generate a first
7 classification for the request;

8 applying means for applying a hashing algorithm to
9 the current policy configuration to generate the first
10 hash value; and

11 placing means for placing the first hash value and
12 information associated with the first hash value within a
13 new cookie.

1 25. The data processing system of claim 22, wherein the
2 selected cookie includes a universal resource identifier,
3 a user identification, and a group identification.

1 26. The data processing system of claim 22, wherein the
2 information includes a quality of service indicator.

1 27. A computer program product in a computer readable
2 medium for processing a request, the computer program
3 product comprising:

4 first instructions for receiving the request;
5 second instructions, responsive to a first hash
6 value being present within the request, for comparing the
7 first hash value to a second hash value, wherein the
8 second hash value represents a current policy
9 configuration for a quality of service; and

10 third instructions, responsive to a match between
11 the first hash value and the second hash value, for
12 setting a quality of service based on information
13 associated with the first hash value.

1 28. The computer program product of claim 27, wherein
2 the first hash value and the information are located in a
3 cookie within the request.

1 29. The computer program product of claim 28, wherein
2 the cookie is located within a header of the request.

1 30. The computer program product of claim 27, wherein
2 the request is a hypertext transport protocol request.

1 31. The computer program product of claim 27 further
2 comprising:

3 fourth instructions, responsive to an absence of a
4 hash value in the request, for identifying a policy rule
5 for processing the request to form an identified policy
6 rule;

7 fifth instructions for identifying a classification
8 for the request using the identified policy rule;

9 sixth instructions for hashing the current policy
10 configuration, of which the identified policy rule is a
11 part, using a hashing algorithm to generate a current
12 hash value; and

13 seventh instructions for placing the current hash
14 value and the information into the request.

1 32. The computer program product of claim 31, wherein
2 the hash value and the information are placed into a
3 cookie.

1 33. The computer program product of claim 27, wherein
2 the data processing system is a server.

1 34. A computer program product in a computer readable
2 medium for processing a request, the computer program
3 product comprising:

4 first instructions, responsive to receiving a
5 request containing a selected cookie in which the
6 selected cookie includes a first hash value and
7 information associated with the hash value, for
8 determining whether the first hash value corresponds to a
9 second hash value, wherein the second hash value
10 represents a current policy configuration for processing
11 requests by the data processing system; and

12 second instructions, responsive to a correspondence
13 between the first hash value and the second hash value,
14 for processing the request using the information.

1 35. The computer program product of claim 34 further
2 comprising:

3 third instructions, responsive to receiving a
4 request containing the selected cookie, for determining
5 whether the selected cookie is stale;

6 fourth instructions, responsive to an absence by a
7 determination that the cookie being is stale, for
8 generating a new classification for the request; and
9 fifth instructions, responsive to the cookie being
10 stale, for preventing initiation of the determining step.

1 36. The computer program product of claim 35 further
2 comprising:

3 sixth instructions, responsive to an absence of the
4 selected cookie, for processing the request with the
5 current policy configuration to generate a first
6 classification for the request;

7 seventh instructions for applying a hashing
8 algorithm to the current policy configuration to generate
9 the first hash value; and

10 eighth instructions for placing the first hash value
11 and information associated with the first hash value
12 within a new cookie.

1 37. The computer program product of claim 34, wherein
2 the selected cookie includes a universal resource
3 identifier, a user identification, and a group
4 identification.

1 38. The computer program product of claim 34, wherein
2 the information includes a quality of service indicator.